

REMARKS

Claims 1-2 and 5 have been canceled. Claims 3-4 and 6-7 remain pending in the application. Applicant amends claims 3-4 and 7 for clarification. No new matter has been added.

Applicant acknowledges with appreciation the allowance of claim 6.

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 6,009,090 to Oishi et al. in view of U.S. Patent No. 5,504,775 to Chouly et al.; claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Oishi et al., Chouly et al., and further in view of U.S. Patent No. 6,097,714 to Nagatani et al.; and claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Oishi et al. in view of U.S. Patent No. 6,625,173 to Yanagi, U.S. Patent No. 6,603,777 to Kubota, and Chouly et al. Applicant amends claims 3-4 and 7 in a good faith effort to clarify the invention as distinguished from the cited references, and respectfully traverse the rejections.

The Examiner maintained the rejections by contending that the description and illustration of OFDM⁻¹ and SSC⁻¹ in Chouly et al. sufficiently suggest a receiver performing operations that are reverse to those performed at a transmitter.

Again, the Examiner relied upon Oishi et al. as the principal reference that allegedly discloses the main features of the claimed invention, and relied upon Chouly et al. as a combining reference specifically for its alleged suggestion of the aforementioned reverse operations.

The cited portions of Oishi et al.—for example, Fig. 4 and corresponding description thereof—only include description of decreasing a signal V by a damping factor α according to an envelope value $|V|$ of the signal and irrespective of the signal vector—in other words, regardless of whether the signal V is on the I or Q axis. The description corresponding to Fig. 4 of Oishi et al. only includes description of applying the damping factor to the

respective I and Q components, V_I and V_Q , of the signal V for the damping—i.e., αV_I and αV_Q . As such, Oishi et al., as cited and relied upon by the Examiner—and, correspondingly, the Examiner’s proposed combination of Oishi et al. and Chouly et al.—fail to disclose or suggest any consideration for determining whether a signal is on the I or Q axis—and, correspondingly, fail to disclose or suggest the claimed feature of increasing “the amplitude component of the received signal when the received signal is on the I axis or on the Q axis.” (Emphasis added)

In other words, even assuming, arguendo, that it would have been obvious to one skilled in the art to combine Oishi et al. and Chouly et al. at the time the claimed invention was made, such a combination would still have failed to disclose or suggest,

“[a] digital baseband demodulation apparatus,
comprising:
a quadrature detection unit that detects an I component
signal and a Q component signal with respect to a received
signal;
an amplitude control unit that increases the amplitude
component of the received signal when the received signal is
on the I axis or on the Q axis; and
a despread demodulation unit that complex despreads
the I component signal and the Q component signal by using
spreading code for I axis and spreading code for Q axis to
obtain a complex despread signal,” as recited in claim 3.
(Emphasis added)

Accordingly, Applicant respectfully submits that claim 3 is patentable over Oishi et al. and Chouly et al., separately or in combination, for at least the foregoing reasons. The Examiner cited Nagatani et al. as a combining reference to specifically address the additional features recited in claim 4, which depends from claim 3. As such, the addition of Nagatani et al. would still have failed to cure the above-described deficiencies of Oishi et al. and Chouly et al., even assuming, arguendo, that such an addition would have been obvious to one skilled in the art at the time the claimed invention was made. Accordingly, Applicant respectfully submits that claim 4 is patentable over the cited references for at least the foregoing reasons.

The Examiner cited Yanagi and Kubota as combining references to specifically address additional features recited in claim 7, which also incorporates features that correspond to those of claim 3 cited above. As such, the addition of Yanagi and Kubota would still have failed to cure the above-described deficiencies of Oishi et al. and Chouly et al., even assuming, arguendo, that such an addition would have been obvious to one skilled in the art at the time the claimed invention was made. Accordingly, Applicant respectfully submits that claim 7 is patentable over the cited references for at least the foregoing reasons.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,

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